BBS

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JOHN ENGLER
GOVERNOR

RUSSELL J. HARDING
DIRECTOR

January 15, 2002

Mr. John D. Wagner
Mueller Industries, Inc.
2199 Lapeer Avenue
Port Huron, Michigan 48060

Dear Mr. Wagner:

This letter is in reference to your Permit to Install application for permit revisions for the brass rod manufacturing facility (State Registration Number A6262) located at 2199 Lapeer Avenue, Port Huron, Michigan. This application, identified as No. 180-00A, has been evaluated and approved by the Air Quality Division, pursuant to the delegation of authority from the Michigan Department of Environmental Quality.

This approval is based upon and subject to compliance with all administrative rules of the Department and conditions stipulated in the attached supplement. **Please review these conditions thoroughly so that you may take the actions necessary to ensure compliance with all of these conditions.**

Approval of the permit does not constitute a waiver by the State of Michigan of its rights to bring appropriate legal action against the applicant for failing to obtain the required permit prior to the commencement of construction.

Also, Permit to Install No. 180-00 has been voided because the equipment is now covered by Permit to Install No. 180-00A.

Please contact me if you have any questions regarding this permit.

Sincerely,

David K. Riddle
Thermal Process Unit
Permit Section
Air Quality Division
(517) 373-7081

Attachments
cc: Ms. Lillian Woolley, District Supervisor
Mr. David Snowden, Dave Snowden & Associates

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR QUALITY DIVISION

AIR USE PERMIT APPLICATION

For authority to install, construct, reconstruct, relocate, modify, or alter process, fuel-burning or refuse burning equipment and/or control equipment (permits to install are required by administrative rules pursuant to section 5505 of act 451, p.a. 1994 as amended).

FOR DEQ USE ONLY
APPLICATION NUMBER: 180-00A

Please type or print clearly. For further instructions, see the reverse side of this form or contact the Air Quality Division at 517-373-7023.

RECEIVED
OCT 0 5 2001
AIR QUALITY DIV.

1. APPLICANT NAME: (Business License Name of Corporation, Partnership, Individual Owner, Government Agency)
MUELLER INDUSTRIES INC.

2. APPLICANT ADDRESS: (Number and Street)
2199 LAPEER AVENUE

CITY: (City or Village) PORT HURON | STATE: MI | ZIP CODE: 48060

3. EQUIPMENT OR PROCESS LOCATION: (Number and Street) (If different than item 2)
SAME

COUNTY: ST. CLAIR

CITY: (City or Village)

ZIP CODE:

4. GENERAL NATURE OF BUSINESS:
MANUFACTURE of EXTRUDED BRASS ROD

5. EQUIPMENT OR PROCESS DESCRIPTION: **A Description MUST Be Provided Here.** (Attach additional sheets, if necessary. Include Source Classification Codes [SCC])
PERMIT LANGUAGE CLARIFICATION

6. FACILITY CODES:
STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE: 3463 STATE REGISTRATION (EMISSION INVENTORY) NO.: A6262

7. ACTION AND TIMING: (Enter dates for those which apply)	ESTIMATED STARTING DATE	ESTIMATED COMPLETION DATE
INSTALLATION, CONSTRUCTION, RECONSTRUCTION OR ALTERATION:	5 NOV 01	5 NOV 01
RELOCATION:		
CHANGE OF OWNERSHIP:		

8. NAME OF PRIOR OWNER, IF ANY:

PRIOR AIR USE PERMIT NUMBER, IF ANY: 180-00

9. AUTHORIZED FIRM MEMBER CERTIFICATION:
PRINTED OR TYPED NAME: JOHN D WAGNER | TITLE: Director of Environmental Affairs | PHONE NUMBER: (Include Area Code) 810 987 7770
SIGNATURE: | DATE: 5 Oct 2001

10. CONTACT PERSON NAME: (If different than name in item 9) | PHONE NUMBER: (Include Area Code)

11. DISPOSITION OF APPLICATION: **FOR DEQ USE ONLY. DO NOT WRITE BELOW**

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: 10-8-01

DATE PERMIT TO INSTALL APPROVED:* 1-15-02 | SIGNATURE:

DATE APPLICATION / PERMIT VOIDED: | SIGNATURE:

DATE APPLICATION / PERMIT DENIED: | SIGNATURE:

*SUBJECT TO COMPLIANCE WITH ALL DEPARTMENT RULES AND THE CONDITIONS STIPULATED IN THE ATTACHED SUPPLEMENT.

SUPPLEMENT to PERMIT No. 180-00A
Mueller Brass Company
Port Huron, Michigan
January 15, 2001

GENERAL CONDITIONS

1. Rule 201(1) - The process or process equipment covered by this permit shall not be reconstructed, relocated, altered, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule.

2. Rule 201(4) - If the installation, reconstruction, relocation, or alteration of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration of the equipment allowed by this Permit to Install.

3. Rule 201(6)(a) - If this Permit to Install is issued for a process or process equipment located at a stationary source that is subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, trial operation is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install and until the appropriate terms and conditions of this Permit to Install have been incorporated into the Renewable Operating Permit. Upon incorporation of the appropriate terms and conditions into the Renewable Operating Permit, this Permit to Install shall become void.

4. Rules 201(6)(b) - If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install.

5. Rule 201(8) and Section 5510 of Act 451, P.A. 1994 - The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Departments' rules or the Clean Air Act.

6. Rule 219 - The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b) and (c) of R 336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality.

7. Rule 901 - Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property.

8. Rule 912 - The owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the District Supervisor within 10 days, with the information required in this rule.

9. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, P.A. 1994 or the Clean Air Act.

10. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

11. Operation of this equipment may be subject to other requirements of Part 55 of Act 451, P.A. 1994, and the rules promulgated thereunder.

12. Rule 301 - Except as provided in subrules (2), and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303.

    a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.

    b) A visible emission limit specified by an applicable federal new source performance standard.

    c) A visible emission limit specified as a condition of this permit to install.

13. Rule 370 - Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2).

14. Rule 285 - Except as allowed by Rule 285 (a), (b), and (c), applicant shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division.

15. The Department may require the applicant to conduct acceptable performance tests, at the applicant's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001.

SPECIAL CONDITIONS
January 15, 2002

1. The following table identifies the Emission Unit and Flexible Group designations for the Mueller Brass Company equipment covered by this permit. (R 336.1201)

Emission Unit or Flexible Group	Emission Unit Description	Process Design Limit	Control Description and Stack Identification
FGSYSTEMB	EUASHDUMPER EUCHIPFURNACE2 EUCHANFURNACE1 EUCASTFURNACE3		
EUASHDUMPER	Ash Dumper	Throughput as required for furnace operation	Baghouse System B 75,000 ACFM Capacity Two Stack IDs for each of five modules
EUCHIPFURNACE2	Chip Melter	33 tons per hour electric induction furnace	
EUCHANFURNACE1	Channel Furnace	33 tons per hour electric induction furnace	
EUCASTFURNACE3	Casting Furnace	33 tons per hour electric induction furnace	
FGBILLETHEATERS	EUBILLETHEATER1 EUBILLETHEATER2 EUBILLETHEATER3		
EUBILLETHEATER1	Billet Heater #1	10.8 MMBtu/hr natural gas fired	4,000 ACFM Combustion gas exhaust through SV-PBH-001
EUBILLETHEATER2	Billet Heater #2	10.8 MMBtu/hr natural gas fired	4,000 ACFM Combustion gas exhaust through SV-PBH-001
EUBILLETHEATER3	Billet Heater #3	10.8 MMBtu/hr natural gas fired	4,000 ACFM Combustion gas exhaust through SV-PBH-001

Emission Unit or Flexible Group	Emission Unit Description	Process Design Limit	Control Description and Stack Identification
FGSYSTEMC	EUMELTFURNACE3S EUMELTFURNACE3N EUMELTFURNACE3W EUHOLDFURNACE3		
EUMELTFURNACE3S	#3 South Melting Furnace	Electric Induction furnace	Baghouse System C 120,000 ACFM Capacity Two vents for each of eight modules
EUMELTFURNACE3N	#3 North Melting Furnace	Electric Induction furnace	
EUMELTFURNACE3W	#3 West Melting Furnace	Electric Induction furnace	
EUHOLDFURNACE3	#3 Holding Furnace	Electric Induction furnace	
FGSYSTEMA	EUMELTFURNACE1 EUMELTFURNACE2 EUHOLDFURNACE6 EUMELTFURNACE6W EUHOLDFURNACE5 EUMELTFURNACE5E EUASHCHUTE EUHOLDFURNACE1 EUHOLDFURNACE2 EULAUNDERS EUMELTFURNACE5W		
EUMELTFURNACE1	#1 Melting Furnace	Electric Induction furnace	Baghouse System A 75,000 ACFM Capacity Two Stack IDs for each of five modules
EUMELTFURNACE2	#2 Melting Furnace	Electric Induction furnace	
EUHOLDFURNACE6	#6 Holding Furnace	Electric Induction furnace	
EUMELTFURNACE6W	#6 West Melting Furnace	Electric Induction furnace	
EUHOLDFURNACE5	#5 Holding furnace	Electric Induction furnace	
EUMELTFURNACE5E	#5 East Melting Furnace	Electric Induction furnace	

Emission Unit or Flexible Group	Emission Unit Description	Process Design Limit	Control Description and Stack Identification
FGSYSTEMA (continued)			Baghouse System A 75,000 ACFM Capacity Two Stack IDs for each of five modules
EUASHCHUTE	Ash Chute Also called "ash hopper for skimmeys"	Throughput as required for furnace operation	
EUHOLDFURNACE1	#1 Holding Furnace	Electric Induction furnace	
EUHOLDFURNACE2	#2 Holding Furnace	Electric Induction furnace	
EULAUNDERS	#5 & #6 Launder Chutes	As required to transfer molten metal	
EUMELTFURNACE5W	#5 West Melting Furnace	Electric Induction furnace	
FGCHIPDRYERS	EU-R-CHIPDRYER EUALLISCHIPDRYER		
EU-R-CHIPDRYER	Bartlett Snow (Raymond) Chip Dryer	Natural gas fired 10 MMBtu/hr	Wet scrubber + Combustion gases SV00003
EUALLISCHIPDRYER	Allis Mineral Systems Chip Dryer or Allis "A"-Chip Dryer	Natural gas fired 3.5 MMBtu/hr	Cyclone-Afterburner-Quench-Baghouse-SV00011 Combustion gases SV00012

Emission Unit or Flexible Group	Emission Unit Description	Process Design Limit	Control Description and Stack Identification
FGCLEANINGLINES	EUFORG-PICKLE DV#4PICKLELINE DV#5PICKLELINE DVCENTERBAYPICKL		
EUFORG-PICKLE Forging Pickle Line: 3 vats (6,7&8) nitric acid vat + 2 water rinse for Brass Dip		Throughput based on production	Scrubber Stack SV00020
Forging Pickle Line: 6 vats (1,2,4,5,9&10) nitric acid vat + water rinses for Aluminum		Throughput based on production	No controls SV00021
Forging Pickle Line: Vat 3 only, caustic dip for both Aluminum & Brass		Throughput based on production	No controls SV00022
DV#4PICKLELINE: #4 Coil Pickle Tank Sulfuric Acid Pickling Tank		Throughput based on production	
DV#5PICKLELINE: #5 Coil Pickle Sulfuric Acid Pickling Tank		Throughput based on production	
DVCENTERBAYPICKL: Center Bay Pickle Line Sulfuric Acid Pickling Tank		Throughput based on production	
EUSLUDGEDRYER HW Sludge Dryer Wastewater Sludge Dryer WWTP Filtercake dryer		Natural gas fired Throughput based on production	SV00006 combustion gases Dust Collection with wet scrubber SV00007
FGMISC	Natural gas-fired equipment listed below		
DVRODMILLBOILER		2.25 MMBtu/hr Natural gas fired	SV00005
Forging pre-heat & heat treat furnaces		Natural gas fired	
Hot water boilers		Typically less than 1 MMBtu/hr natural gas fired	
Facility heaters		Natural gas fired	

ALL EMISSION UNITS

Emission Limits

2. The hazardous air pollutant (HAP) emissions, as defined pursuant to Section 112(b) of the Clean Air Act, shall be less than 9 tons per year for any individual HAP and 22 tons per year for any combination of HAPs at this stationary source. The annual limit shall be based upon a 12-month rolling time period as determined at the end of each production month. (40 CFR 63.1)

3. The total particulate matter less than 10 microns (PM-10) emission rate from the stationary source shall not exceed 88 tons per year, based upon a 12-month rolling time period as determined at the end of each production month. (R 336.1205(3))

4. The total nitrogen oxides (NOx) emission rate from the stationary source shall not exceed 89.9 tons per year, based upon a 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(3))

Monitoring, Stack Testing, Recordkeeping, and Reporting

5. The applicant shall calculate the individual and aggregate HAP emission rates as a combined total for the stationary source for each production month. The records shall be sufficient to determine the rates on a calendar month basis upon request by the District Supervisor, Air Quality Division. This information shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. (R 336.1225)

6. The applicant shall calculate the total PM-10 emission rates as a combined total for the stationary source for each production month. The records shall be sufficient to determine the rates on a calendar month basis upon request by the District Supervisor, Air Quality Division. This information shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. (R 336.1205(3))

7. The applicant shall calculate the total NOx emission rates as a combined total for the stationary source for each calendar month. This information shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. (R 336.1205(3))

8. Applicant shall keep records of the amount of fuel combusted as a combined total for the stationary source for each calendar month. These records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. (R 336.1201(3))

FGSYSTEMB

Emission Limits

9. The particulate emission from FGSYSTEMB as controlled through Baghouse System B shall not exceed 1.0 pounds per hour nor 4.38 tons per 12-month rolling time period. (R 336.1331)

Process Restrictions

10. The applicant shall not operate FGSYSTEMB unless Baghouse System B is installed and operating properly. (R 336.1331)

11. The applicant shall equip and maintain each compartment Baghouse System B with a pressure drop indicator. (R 336.1910).

12. The applicant shall not operate the brass melting and holding furnaces unless a pressure drop between 4.0 and 12.0 inches W.G. is maintained across each operating compartment (or module) of Baghouse System B. (R 336.1331).

13. The exhaust gases from FGSYSTEMB shall be discharged unobstructed vertically upwards to the ambient air from 10 stacks, each with a maximum diameter of 21 inches at an exit point not less than 50 feet above ground level. There shall be two stacks per module for each of the five modules of Baghouse System B, identified as SV-BHBM1-01, SV-BHBM1-02, SV-BHBM2-01, SV-BHBM2-02, SV-BHBM3-01, SV-BHBM3-02, SV-BHBM4-01, SV-BHBM4-02, SV-BHBM5-01, and SV-BHBM5-02. (R 336.1901)

FGBILLETHEATERS

Process Restrictions

14. Applicant shall not burn any fuel other than natural gas in FGBILLETHEATERS. (R 336.1201(3))

15. The exhaust gases from EUBILLETHEATER1 shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV-PBH-001) with a maximum diameter of 32 inches at an exit point not less than 22 feet above ground level. This condition is necessary to assure compliance with Rule 901.

16. The exhaust gases from EUBILLETHEATER2 shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV-PBH-001) with a maximum diameter of 32 inches at an exit point not less than 22 feet above ground level. This condition is necessary to assure compliance with Rule 901.

17. The exhaust gases from EUBILLETHEATER3 shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV-PBH-001) with a maximum diameter of 32 inches at an exit point not less than 22 feet above ground level. This condition is necessary to assure compliance with Rule 901.

FGSYSTEMC

Emission Limits

18. The particulate emission from FGSYSTEMC as controlled through Baghouse System C shall not exceed 1.0 pounds per hour nor 4.38 tons per 12-month rolling time period. (R 336.1331)

Process Restrictions

19. The applicant shall not operate FGSYSTEMC unless Baghouse System C is installed and operating properly. (R 336.1331)

20. The applicant shall equip and maintain each compartment Baghouse System C with a pressure drop indicator. (R 336.1910).

21. The applicant shall not operate the brass melting and holding furnaces unless a pressure drop between 4.0 and 12.0 inches W.G. is maintained across each operating compartment (or module) of Baghouse System C. (R 336.1331).

22. The exhaust gases from FGSYSTEMC shall be discharged to the ambient air from 16 louvered vents each with maximum dimensions of 2 feet by 2.5 feet at an exit point not less than 28 feet above ground level. There shall be two vents per module for each of the eight modules of Baghouse System C, identified as SV-BHCM1-01, SV-BHCM1-02, SV-BHCM2-01, SV-BHCM2-02, SV-BHCM3-01, SV-BHCM3-02, SV-BHCM4-01, SV-BHCM4-02, SV-BHCM5-01, SV-BHCM5-02, SV-BHCM6-01, SV-BHCM6-02 SV-BHCM7-01, SV-BHCM7-02 SV-BHCM8-01, and SV-BHCM8-02. (R 336.1901)

FGSYSTEMA

Emission Limits

23. The particulate emission from FGSYSTEMA as controlled through Baghouse System A shall not exceed 1.0 pounds per hour nor 4.38 tons per 12-month rolling time period. (R 336.1331)

Process Restrictions

24. The applicant shall not operate FGSYSTEMA unless Baghouse System A is installed and operating properly. (R 336.1331)

25. The applicant shall equip and maintain each compartment Baghouse System A with a pressure drop indicator. (R 336.1910).

26. The applicant shall not operate FGSYSTEMA unless a pressure drop between 4.0 and 12.0 inches W.G. is maintained across each operating compartment (or module) of Baghouse System A. (R 336.1331).

27. The exhaust gases from FGSYSTEMA shall be discharged unobstructed vertically upwards to the ambient air from 10 stacks, each with a maximum diameter of 21 inches at an exit point not less than 50 feet above ground level. There shall be two stacks per module for each of the five modules of Baghouse System A, identified as SV-BHAM1-01, SV-BHAM1-02, SV-BHAM2-01, SV-BHAM2-02, SV-BHAM3-01, SV-BHAM3-02, SV-BHAM4-01, SV-BHAM4-02, SV-BHAM5-01, and SV-BHAM5-02. (R 336.1901)

FGCHIPDRYERS

Emission Limits

28. The particulate emission from FGCHIPDRYERS shall not exceed 0.10 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis. (R 336.1331).

29. The particulate emission rate from EU-R-CHIPDRYER shall not exceed 2.4 pounds per hour nor 10.6 tons per year, based upon a 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(3)).

30. The particulate emission rate from EUALLISCHIPDRYER shall not exceed 2.7 pounds per hour nor 11.8 tons per year, based upon a 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(3)).

31. The total hydrogen chloride emission rate from FGCHIPDRYERS shall not exceed 8.7 tons per year, based upon a 12-month rolling time period as determined at the end of each calendar month. (R 336.1225).

Process Restrictions

32. The applicant shall not operate EU-R-CHIPDRYER unless the wet scrubber is installed and operating properly. (R 336.1910)

33. The applicant shall not operate EUALLISCHIPDRYER unless the cyclone, thermal oxidizer, quench (heat exchanger), and baghouse control equipment for process emissions is installed and operating properly. (R 336.1910)

34. The applicant shall not operate EUALLISCHIPDRYER unless an average temperature of 1500 degrees Fahrenheit and a minimum retention time of 1.5 seconds in the thermal oxidizer is maintained during operation. (R 336.1224).

35. The applicant shall equip and maintain the baghouse associated with EUALLISCHIPDRYER with a gauge for measuring the pressure drop and shall equip and maintain the afterburner with a temperature gauge. (R 336.1205(3)). This condition is necessary to assure compliance with Rule 910.

36. The exhaust gases from EU-R-CHIPDRYER shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV00003) with a maximum diameter of 30 inches at an exit point not less than 67 feet above ground level. (R 336.1901).

37. The process exhaust gases from EUALLISCHIPDRYER shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV00011) with a maximum diameter of 24 inches at an exit point not less than 61 feet above ground level. (R 336.1901).

38. The combustion products exhaust gases from EUALLISCHIPDRYER shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV00012) with a maximum diameter of 36 inches at an exit point not less than 55 feet above ground level. (R 336.1901).

39. Input feeds to EU-R-CHIPDRYER and/or EUALLISCHIPDRYER shall cease immediately, consistent with safe operating procedures, upon initiation of collector bypass. Input feed to EU-R-CHIPDRYER and/or EUALLISCHIPDRYER shall not restart until the collector associated with the affected unit is back on line and functioning properly. (R 336.1912(1)).

FGCLEANINGLINES

Emission Limits

40. The nitric acid emission from FGCLEANINGLINES shall not exceed 40 milligrams per cubic meter, corrected to 70 degrees Fahrenheit and 29.92 inches Hg nor 0.3 pound per hour. [R 336.1225]

41. The hydrogen chloride emission from FGCLEANINGLINES shall not exceed 3.3 milligrams per cubic meter, corrected to 70 degrees Fahrenheit and 29.92 inches Hg nor 0.03 pounds per hour. [R 336.1225]

Process Restrictions

42. The applicant shall not operate FGCLEANINGLINES unless the scrubber is installed and operating properly. [R 336.1910]

43. The applicant shall not operate FGCLEANINGLINES unless a scrubber pressure drop between 2 and 4.5 inches W.G. is maintained [R 336.1910]

44. The exhaust gases from the nitric acid tank identified as vat 5 and rinse vats 6 and 7 of EUFORG-PICKLE shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV00020) with a maximum diameter of 14 inches at an exit point not less than 55 feet above ground level. [R 336.1901]

45. The exhaust gases from vats 1,2,4,8,9,and 10 of EUFORG-PICKLE shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV00021) with a

maximum diameter of 24 inches at an exit point not less than 52 feet above ground level. [R 336.1901]

46. The exhaust gases from vat 3 (caustic cleaner) of EUFORG-PICKLE shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV00022) with a maximum diameter of 18 inches at an exit point not less than 39 feet above ground level. [R 336.1901]

Monitoring, Recordkeeping, and Reporting

47. Applicant shall monitor and record the pressure drop across the wet scrubber on a regular basis in a manner and with instrumentation acceptable to the Air Quality Division. Monitoring shall be completed not less than once per work shift when the scrubber is operating. Pressure drop data shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request. (R 336.1910) and (R 336.1911)

EUSLUDGEDRYER

Emission Limits

48. There shall be no visible emissions from EUSLUDGEDRYER except for uncombined water vapor. (R 336.1205(3)).

49. The particulate emission rate from EUSLUDGEDRYER shall not exceed 1.0 ton per year, based upon a 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(3)).

Process Restrictions

50. The applicant shall not operate EUSLUDGEDRYER unless the wet scrubber is installed and operating properly. (R 336.1331).

51. The process exhaust gases from EUSLUDGEDRYER shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV00007) with a maximum diameter of 12 inches at an exit point not less than 42 feet above ground level. (R 336.1901).

52. The combustion products exhaust gases from the EUSLUDGEDRYER shall be discharged unobstructed vertically upwards to the ambient air from a stack (SV00006) with a maximum diameter of 8 inches at an exit point not less than 67 feet above ground level. (R 336.1901).

Monitoring, Stack Testing, Recordkeeping, and Reporting

53. Applicant shall not substitute any sludge for that described in this permit application which would result in an appreciable change in the quality or any appreciable increase in the quantity of the emission of an air contaminant without prior notification to and approval by the Air Quality Division. (R336.1205(3)).

54. The moisture content of the dried sludge leaving EUSLUDGEDRYER shall not be less than 55% by weight. Within 45 days of receipt of a written request by the District Supervisor, Air Quality Division, applicant shall submit to the District Supervisor a certified moisture analysis of dried sludge leaving the process. (R 336.1331 and R 336.1901).

FGMISC

55. Applicant shall not burn any fuel other than natural gas in the fuel burning equipment included in FGMISC. (R 336.1201(3))

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
PERMIT EVALUATION FORM 01/15/02

APPLICATION NO. YR.Suf.Sup# 180 0 A 0 Pmt ID No. 24588 Permit_Rvwr D. RIDDLE Rev. Unit TPU Class 1
APPLICANT NAME MUELLER INDUSTRIES INC Site_Rvwr .
State Reg. No. A6262 (New No. request date) / /

Site Owner: MUELLER BRASS COMPANY INC
Location of Source:
2199 LAPEER AVENUE
PORT HURON MI 48060

Co. Contact (810) 987-7770
JOHN WAGNER
MUELLER INDUSTRIES INC
2199 LAPEER AVENUE
PORT HURON MI 48060

County SAINT CLAIR County No.74 District 3 Temp Site F Soil Remed F

Site Comments:

REASON FOR APPLICATION BRASS FOUNDRY-DELETE TESTING REQUIREMENT

INSTALLATION DATE: PROCESS EQUIPMENT 11/01/00 CONTROL EQUIPMENT 11/01/00

RELATED PERMIT(S) VOIDS

POLLUTANTS NETTED OUT FROM PSD REVIEW

STATE/FED. AIR REG'S SOURCE IS SUBJECT TO? NSPS F, NESHAPs F, PSD F, Act 64 F

SIP Rule No.(s) 225, 205, 331, 910 Other 901

OPT-OUT? F ENFORCEMENT? F

EPA NOTIFICATION REQUIRED? F DATE INFO SENT TO EPA? / /

OFFSETS PROVIDED? F IF YES, HOW MUCH AND FROM WHERE?

App_recvd	10/05/01	Log_date	10/08/01	Screened	10/08/01	Adm_Cmplt	/ /
Assigned	10/08/01	TecDetrmn	11/14/01	Tec_Cmplt	10/08/01	Site_Aprvd	/ /
PTI_Aprvd	/ /	PTI_Denied	/ /	PTI_Void	/ /		
Total_days	0	Complete_days	0	Eval_days	0		
Pmt_ToTox	/ /	Pmt_FrTox	/ /	PmtToMod	/ /	PmtFrMod	/ /
Add_Info1	/ /	Co_Rspons1	/ /	Add_Info2	/ /	Co_Rspons2	/ /
Draft_Pmt	12/18/01	Co_Accept	01/14/02	Scr_Letter	/ /	To_Dist	/ /

Reviewed By: David K. Riddle Date: 01-15-02

Approved By: _____ Date: _____

PERMIT NO. YR.Suf.Sup#
180 0 A 0

PERMIT No. Yr.Suf.Sup. ESTAB No. 01/15/02
180 0 A 0 A6262

DESCRIPTION OF SOURCE & RELATED CONTROL EQUIP./TECHNOLOGY
Permit is unchanged from 180-00 except for deletion of particulate matter testing requirement. total particulate emissions allowed are approximately 20 tons per year, not near any threshold.

This permit is for the entire brass rod producing foundry, including three new electric induction furnaces, three new natural gas-fired billet heaters, and modifications to the routing of exhaust gases to various baghouses.

FGSYSTEMB: Equipment ducted to baghouse system B (75,000 ACFM) for control including EUASHDUMPER (Ash Dumper) and three new 33 tons per hour electric induction furnaces: EUCHIPFURNACE2, EUCHANFURNACE1, and EUCASTFURNACE3 which are the chip melter, channel furnace, and casting furnace.

FGBILLETHEATERS: Three new 10.8 MMBtu/hr natural gas fired furnaces, each with 4,000 ACFM combustion gas--EUBILLETHEATER1, EUBILLETHEATER2, EUBILLETHEATER3.

FGSYSTEMC: Four electric induction furnaces (3 melting, 1 holding furnace) ducted to baghouse system C (120,000 ACFM). EUMELTFURNACE3S, EUMELTFURNACE3N, EUMELTFURNACE3W, and EUHOLDFURNACE3

FGSYSTEMA: Formerly known as RGCASTINGPROCESS. 9 total electric induction furnaces (5 melting, 4 holding) and an ash chute and two "launder chutes" for transfer of molten metal. EUMELTFURNACE1, EUMELTFURNACE2, EUHOLDFURNACE6, EUMELTFURNACE6W, EUHOLDFURNACE5, EUMELTFURNACE5E, EUASHCHUTE, EUHOLDFURNACE1, EUHOLDFURNACE2, EULAUNDERS, EUMELTFURNACE5W

FGCHIPDRYERS: EU-R-CHIPDRYER is a natural gas-fired 10 MMBtu/hr unit controlled by a 65 gallon per minute venturi scrubber for both combustion and process exhaust. EUALLISCHIPDRYER is a natural gas-fired 3.5 MMBtu/hr unit which uses a cyclone, afterburner, quench, and baghouse for process exhaust control with a separate exhaust for combustion gases.

FGCLEANINGLINES: EUFORG-PICKLE includes 10 vats used for cleaning and treating brass and aluminum, including nitric acid cleaning controlled by a 65 gpm venturi scrubber. 3 sulfuric acid pickle tanks are included in this flexible group: DV#4 PICKLELINE; DV#5PICKLELINE; and DVCENTERBAYPICKL

EUSLUDGEDRYER is natural gas-fired, has separate exhaust points for combustion gases and dust collection (with a wet scrubber) and minimal emissions.

FGMISC includes several natural gas-fired heaters, water heaters, forging pre-heat and heat treat furnaces, and DVRODMILLBOILER. It is included as part of the NOx inventory for the foundry. Note that "A GRANCO BILLET FURNACE #4" a 29 MMBtu/hr unit with potential emissions of almost 17.8 tons per year of NOx was included in the facility's potential emissions summary in the application, but has since been identified by Mueller Brass as a grandfathered source.

DESCRIPTION OF ANY REQUIRED MONITORING: (CEMS, PROCESS, CONTROL EQUIP.)
fuel usage, cleaning line scrubber pressure drop, stack testing

CONTROL EQUIPMENT BYPASS, IF ANY, & REASON WHEN BYPASS OCCURS:

PROCESS/CONTROL WASTE AND DISPOSAL
proper disposal of waste (ash). metal waste returned to process.

GENERAL COMMENTS
Delay in processing due to lack of response from the district. This was Dave Morgan's facility before he left Livonia and I still do not know who the new inspector is.

Secondary metal production plants are a listed category in PSD. Particulate emissions for this facility were originally calculated on the basis of Rule 331 and apparently were substantially overestimated. The previous potential to emit was 88 tons per year, and the additional particulate emissions from the new equipment had the total approaching the major source threshold of 100 tons per year. This application, which included not only the new equipment but also some reconfiguration of the emission control baghouse systems, estimated the particulate emissions to be much lower than the previous work, less than 50 tons per year, including the new equipment. The permit limits plus 0.2 tons per year for each of the three new billet heaters adds to a total of 37 tons per year particulate PTE. The applicant estimates a potential less than 10 TPY.

Stack testing has been required in the new permit to verify the particulate emission rates. This facility is a minor source of emissions, but based on the previous estimates it was treated as an opt-out source, with limits on throughput to keep the limits enforceable.

A thorough and complete inventory of all equipment combusting natural gas at the facility including many small room heaters and water heaters was submitted with the application. It appeared that the total NOx emissions PTE was in excess of 90 tons per year (65.3 + 29.5 = 94.8). In fact, the inventory was reviewed by the applicant and it was determined that equipment which was grandfathered was included in the list and that the potential NOx emissions decrease by 17.8 tons per year to 77 TPY. Also, much of the heating equipment is not operated 365 days per year and could have been limited in hours of operation per year if that had been necessary.

HAP emissions are minimal.

There are more stacks than EvalForm can accommodate. See the permit file and permit conditions.

The significant delay in review from technical evaluation to additional information request was due to the complexity of the project and workload priorities. --Dave Riddle

BASIS FOR RECOMMENDATION:
Minor change from previous permit. No regulatory limit is in jeopardy of being exceeded. Particulate testing can be deleted.

This is essentially a compilation of two existing permits plus some new heating equipment. The emission limits are lower than in the old permits and stack testing is required.